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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,749	11/18/2003	Thomas Converse	129419-2	5516

7590 11/23/2004  
Robert E. Walter  
General Electric Company  
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EXAMINER

GUTMAN, HILARY L

ART UNIT PAPER NUMBER

3612

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/715,749

Applicant(s)

CONVERSE ET AL.

Examiner

Hilary Gutman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/18/03</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-2, 5-6, 8, and 12-16 are objected to because of the following informalities:

In claim 1, line 4, "the" should be inserted before "impact".

In claim 2, line 3, "a vehicle " should apparently be "the vehicle".

In claim 5, line 3, "an impact" should be "the impact".

In claim 6, line 2, "consist" should be "consists".

In claim 8, line 4, "a" should be inserted before "bumper beam".

In claim 12, line 2, "to claim 13" is inappropriate and unclear since this claim depends from claim 12 and perhaps "claim 11" should be inserted instead of "claim 13".

In claim 13, lines 2-3, "said thermoplastic polymer" should be "said thermoplastic resin".

In claim 14, line 2, "said polyester" should apparently be "said thermoplastic resin".

Also on line 3, "polyethylenes" should be "polyethylene".

In claim 15, line 2, "said polyester" should be "said thermoplastic resin".

In claim 16, line 3, "reinforcing bumper beam" should be "the bumper beam". On line 4, "an automotive vehicle" should apparently be "the vehicle". On line 5, "reinforcing beam" should apparently be "the beam". Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claims 8-10 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "said crushable lobes" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "a pair of adjacent lobes" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the crush means" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "said vehicle bumper" in line 3. There is insufficient antecedent basis for this limitation in the claim.

#### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohta.

Ohta (5,780,129) discloses an energy absorber adapted for attachment to a vehicle for absorbing forces generated from an impact, said energy absorber comprising a blow molded unitary structure having a rearward facing support portion R<sub>2</sub> and a crushable forward projecting portion R<sub>1</sub> adapted to crush upon impact.

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With regard to claim 2, the energy absorber has an elongated shape and is adapted for mounting to the forward end of a vehicle for extending longitudinally across the width of the vehicle.

With regard to claim 3, the energy absorber is “adapted” for pedestrian leg protection and has a highly efficient crush mode.

With regard to claim 4, the energy absorber is “adapted” to reduce forces of impact with legs of a pedestrian.

With regard to claim 5, the energy absorber is “adapted” to absorb energy during an impact of said vehicle at low speeds of less than or equal to 5Mph.

With regard to claim 6, the energy absorber consists essentially of a single integral unit of blow molded material.

With regard to claim 7, the forwardly projecting portion comprises a plurality of forwardly projecting crushable members (generally 1a, 1b, 1c).

With regard to claim 12, the energy absorber comprises a thermoplastic resin.

With regard to claim 13, the thermoplastic resin comprises polyolefin, a polyester resin, a polycarbonate, or mixtures thereof.

With regard to claim 14, the polyester resin can be a high density polyethylene or a low density polyethylene.

With regard to claim 15, the polyester resin can be polybutylene terephthalate and the polycarbonate can apparently be an aromatic polycarbonate.

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*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamada et al. in view of Ohta.

Tamada et al. (6,406,079) disclose an energy absorber 3 adapted for attachment to a vehicle for absorbing forces generated from an impact, said energy absorber comprising a blow molded unitary structure having a rearward facing support portion 9 and a crushable forward projecting portion 8 adapted to crush upon impact.

With regard to claim 2, the energy absorber has an elongated shape and is adapted for mounting to the forward end of a vehicle for extending longitudinally across a portion of the width of the vehicle.

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With regard to claim 3, the energy absorber is “adapted” for pedestrian leg protection and has a highly efficient crush mode.

With regard to claim 4, the energy absorber is “adapted” to reduce forces of impact with legs of a pedestrian.

With regard to claim 5, the energy absorber is “adapted” to absorb energy during an impact of said vehicle at low speeds of less than or equal to 5Mph.

With regard to claim 6, the energy absorber 3 consist essentially of a single integral unit of blow molded material.

With regard to claim 7, the forwardly projecting portion comprises a plurality of forwardly projecting crushable members (Figure 3 or 4).

With regard to claim 8, the energy absorber includes a support portion 9 for crushable lobes 10, the support portion being adapted for attachment to a bumper beam.

With regard to claim 9, the plurality of crushable members extend outwardly from the support portion, each of said crushable members having a forwardly facing front wall, at least a pair of adjacent lobes having interconnecting front walls (Figures 1 and 2).

With regard to claim 10, the plurality of the crush means are attached longitudinally across the front of the support portion.

With regard to claim 11, the plurality of crushable members project forwardly and are spaced apart longitudinally across the support portion.

With regard to claim 12, the energy absorber comprises a thermoplastic resin.

With regard to claim 13, the thermoplastic polymer comprises a polyester resin.

With regard to claim 14 the polyester resin is a high density polyethylene.

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With regard to claim 15, the polyester resin is polybutylene terephthalate.

With regard to claim 16, the energy absorber is interposed between a fascia 4 and the bumper beam, the energy absorber being attachable to the front end of the vehicle, the fascia enveloping the energy absorber and reinforcing beam such that neither component other than the fascia is visible once attached to the vehicle.

Tamada et al. lack the energy absorber extending longitudinally across the entire width of the vehicle.

Ohta (5,780,129) teaches an energy absorber adapted for attachment to a vehicle for absorbing forces generated from an impact, said energy absorber comprising a blow molded unitary structure having a rearward facing support portion  $R_2$  and a crushable forward projecting portion  $R_1$  adapted to crush upon impact. The energy absorber extends longitudinally across the width of the vehicle.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the energy absorber of Tamada et al. to have extended across the entire width of the vehicle as taught by Ohta to provide energy absorption qualities to the entire width of the vehicle as opposed to just the left and right side portions.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hilary Gutman whose telephone number is 703-305-0496.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 703-308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11. **Any response to this action should be mailed to:**

Assistant Commissioner for Patents

Washington, D.C. 20231

**or faxed to:**

(703) 872-9326, (for formal communications intended for entry)

**or:**

(703) 746-3515, (for informal or draft communications, please clearly label

"PROPOSED" or "DRAFT").



Hilary Gutman

November 18, 2004